(vs. warfarin), and apixaban (vs. aspirin) to be cost-effective; data on clopidogrel+aspirin (vs. aspirin) to be conflicting, and genotyped-warfarin and ximelagtran not cost-effective. **CONCLUSIONS:** Cost-effectiveness models of pharmacologic SPAF have been extensively published; but none have estimated the comparative cost-effectiveness of newer agents. Models used similar structures and non-drug-specific inputs, and commonly find innovator strategies to be cost-effective.

PCV49

ECONOMIC EVALUATION OF RIVAROXABAN IN STROKE PREVENTION AMONG PATIENTS WITH ATRIAL FIBRILLATION IN GREECE

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OBJECTIVES: To undertake an economic evaluation of rivaroxaban relative to the local standard of care, acenocoumarol, for stroke prevention in atrial fibrillation (AF) patients with one or more risk factors. **METHODS:** A Markov model designed to reflect the natural progression of AF patients through different health states was developed and adapted to the Greek setting. The analysis was undertaken from a payer perspective. Baseline event rates (adjusted to three month cycles) and relative treatment effects (RRs) were derived from the safety on treatment analysis of the ROCKET AF study. Utility values for events were based on literature. A treatment-related disutility of 0.05 was applied to acenocoumarol arm. Costs assigned to each health state reflect local drug acquisition, monitoring, event management and transportation costs and reflect the year 2012. An incremental cost effectiveness ratio (ICER) per quality-adjusted-life year (QALY) gained was calculated. One-way sensitivity analyses were conducted to identify key model drivers. Probabilistic analysis was undertaken to deal with uncertainty. The horizon of analysis was over patient life time and both cost and outcomes were discounted at 3.5%. **RESULTS:** The average total cost of rivaroxaban-treated patients was €985 higher compared to acenocoumarol. Rivaroxaban was associated with additional drug acquisition costs (€5,275), however these were mainly offset by reduced monitoring (€3,947) and event costs (€343). Moreover, rivaroxaban was associated with a 0.22 increment in QALYs leading to an ICER of €4,517/QALY gained. Sensitivity analyses showed that the cost-effectiveness results are fairly robust with discontinuation rate of rivaroxaban, acenocoumarol monitoring visits, acenocoumarol-related utility decrement, RR for rivaroxaban versus acenocoumarol for stroke having the highest impact on results. Probabilistic analysis revealed a high probability of rivaroxaban being cost-effective at a threshold of €30,000 or €40,000/QALY. **CONCLUSIONS:** Rivaroxaban may represent a cost-effective option for the prevention of stroke in AF patients with one or more risk factors.

PCV50

COST-EFFECTIVENESS ANALYSIS OF TREATING ACUTE CORONARY SYNDROME PATIENTS WITH TICAGRELOR VERSUS CLOPIDOGREL IN HONG KONG: A MARKOV ANALYTIC MODEL

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OBJECTIVES: In the PLATO study, ticagrelor significantly reduced the rate of myocardial infarction (MI), stroke, or death from vascular causes without a significant increase in the rate of overall major bleeding compared to Clopidogrel in the management of acute coronary syndrome (ACS) patients. We aimed to assess the long term cost-effectiveness of ticagrelor versus clopidogrel in the management of ACS patients in Hong Kong. **METHODS:** A Markov decision analytic model was used to perform a cost-effectiveness analysis (CEA) of treating ACS patients for one year with ticagrelor plus aspirin (group 1) compared with clopidogrel plus aspirin (group 2) from the Hong Kong health care provider perspective. The model simulates a cohort of 45-year-old patients with ACS moving between different health status in each Markov cycle of 1 year. The time horizon was lifetime (85 years old). Health states included patient in ACS without event, myocardial infarction (MI), and death from vascular cause. Outcome measures included lifetime costs, quality-adjusted life years (QALYs) gained and incremental cost-effectiveness ratios (ICERs). Event rates of group 1 are adopted from the PLATO study and rates of group 2 from the Prince of Wales Hospital ACS Registry in Hong Kong. Probabilistic sensitivity analyses using Monte Carlo simulations were conducted to assess parameter uncertainty. **RESULTS:** The ICER for ticagrelor compared to clopidogrel in the treatment of ACS was HK$34,441 (US$4,415) per QALY gained. For the subset of patients with ST elevation myocardial infarction (STEMI) and non-ST elevation ACS (NSTEACS), the ICERs per QALY gained were HK$ 33,402 (US$4,282) and HK$ 38,844 (4,980) respectively. Ticagrelor treatment strategy was cost-effective over 99% of the Monte Carlo simulation using a cost-effectiveness threshold of <3 times gross domestic product (GDP) per capita in Hong Kong. **CONCLUSIONS:** The treatment of ACS patients with ticagrelor for 12 months is considered cost-effective compared with clopidogrel from a health care provider perspective.

PCV51

COST-EFFECTIVENESS OF RIVAROXABAN FOR THE PREVENTION OF STROKE AND SYSTEMIC EMBOLISM IN ADULT PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION WITH ONE OR MORE RISK FACTORS – A UK PERSPECTIVE

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OBJECTIVES: To evaluate the cost-effectiveness of the once daily oral anticoagulant rivaroxaban for prevention of stroke and systemic embolism in non-valvular atrial fibrillation (NVAF) patients from a UK payer perspective. **METHODS:** A Markov model was developed to evaluate cost-effectiveness over a lifetime time horizon. Costs and benefits were discounted at 3.5%. The patient population of interest were AF patients with one or more risk factors currently treated with warfarin. Clinical inputs were supplied from Safety-on-Treatment data from the Phase III ROCKET trial or informed by systematically reviewed literature. The Intention-to-Treat (ITT) dataset was also used in a sensitivity analysis. Warfarin efficacy data was adjusted to be reflective of the level of INR control found in Western Europe and baseline risk was adjusted to be reflective of the UK population. Economic inputs were based on unit costs from the BNF, PSSRU and NHS Reference costs and resource use was from a dedicated observational study. Utility inputs were taken from a systematic review and included baseline utilities for AF, disutilities for clinical events and warfarin treatment. **RESULTS:** Base case analysis versus warfarin resulted in a total per patient incremental cost of £705 and an incremental QALY gain of 0.2459 with an estimated ICER of £2,869. The ITT analysis returned an ICER of £3,404, with an incremental cost of £775 and an incremental QALY of 0.2277. The sensitivity analyses found that the biggest drivers of the result were discontinuation rates, warfarin monitoring cost in primary care, warfarin disutility and frequency of warfarin monitoring. The PSA indicates that the probability of rivaroxaban being cost-effective at a willingness-to-pay threshold of £20,000 is 97%. **CONCLUSIONS:** Rivaroxaban is a cost-effective alternative to warfarin in the prevention of stroke and systemic embolism in NVAF patients with one or more risk factors as evaluated from a UK payer perspective.

PCV52

COST-EFFECTIVENESS OF ADDING EZETIMIBE TO ATORVASTATIN THERAPY IN PORTUGAL

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OBJECTIVES: Statin monotherapy is the mainstay of LDL-C management for CHD patients in Portugal, however several therapeutic options are available and predicted to have different clinical and economical impact. This analysis estimates the Cost-Effectiveness (CE) of adding ezetimibe 10 mg (EZ10) to generic atorvastatin 10/20 mg (A10/20) against generic atorvastatin titration (A20/40) and against switch to rosuvastatin 10/20 mg (R10/20) in Portuguese CHD patients who are currently above LDL-C goal (≥2.5mmol/L). **METHODS:** The analysis was based on a previously published Markov model, employed to evaluate the life-time costs and health outcomes, including life-years (LY) and quality adjusted life-years (QALY). The model incorporated Framingham risk equations, Portuguese population characteristics, CHD event rates, quality of life estimates, local resource use and due unit costs. **RESULTS:** From 18 CHD patient risk profiles, discounted lifetime costs per patient with A20/40, R10/20 and A10/20+EZ10 treatment were €20,987, €23,134 and €25,476, respectively. Average gain with A10/20+EZ10 were 0.43 LY and 0.17 QALY versus A20/40; and 0.38 LY and 0.15 QALY versus R10/20. Thus, the incremental costs per QALY gained by switching patients from A10/20 to A20/40+EZ10 were €26,435 and €15,907 against titrating to A20/40 and switch to R10/20, respectively. Based on the Portuguese CE acceptability frontier with a willingness-to-pay value of €30.000/QALY gained, A10/20+EZ10 is projected to be CE for CHD patients on secondary prevention. **CONCLUSIONS:** In the Portuguese CHD patients not at LDL-C goal treated with A10/20, adding EZ10 is CE when compared with atorvastatin titration or switching to rosuvastatin. Moreover, the expected erosion of atorvastatin generics' price will favor CE ratio of A10/20+EZ10 versus R10/20 switch. Thus, ezetimibe is effective in lowering LDL-C, and based on the analysis conducted, is projected to reduce CV events, improve quality of life, and is cost-effective by commonly used criteria in Portugal.

PCV53

ECONOMIC EVALUATION OF A SINGLE PILL TRIPLE ANTIHYPERTENSIVE THERAPY WITH VALSARTAN, AMLODIPINE, AND HYDROCHLOROTHIAZIDE AGAINST ITS DUAL COMPONENTS IN GREECE

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OBJECTIVES: Recently, the first single pill (SPC) triple-combination antihypertensive therapy with valsartan(VAL), amlodipine(AML) and hydrochlorothiazide(HCTZ) has been available. The aim of this study is to compare the cost-utility of single pill triple combination with each of the dual combinations deriving from the same components in patients with moderate to severe hypertension. This is the first study to evaluate the CUA of this SPC. **METHODS:** A Markov model with eight health states was constructed. The short-term effect of antihypertensive treatment on blood pressure was extrapolated through the Hellenic SCORE and Framingham risk equations in order to estimate the long-term survival and quality-adjusted life-years (QALYs). Pharmaceutical cost was extracted from the official price bulletins. Cost of adverse events was derived from international literature, reflecting €2012. Outcomes and costs were evaluated over lifetime, divided into annual cycles and were discounted at 3.0%. The analysis was conducted from a Greek third-party-payer perspective. **RESULTS:** The cost of treatment with triple combination was estimated at €17,499 in comparison to €18,203 for AML/VAL, €16,069 for VAL/HCTZ and €11,945 for AML/HCTZ. The QALYs of the triple combination were 12.76 vs. 12.64, 12.61 and 12.38 of double combinations respectively, resulting in incremental QALYs gained of triple vs. double combination in 0.12, 0.15 and 0.38 respectively. The incremental cost-effectiveness ratio (ICER) per QALY gained with the triple combination versus VAL/HCTZ and AML/HCTZ was far lower than the Greek GDP per capita (9,649€, 14,581€, respectively), while the triple combination was found to be dominant in comparison with AML/VAL. Extensive sen-